The 557th Weather Wing

CSAB F2F
Ted Vroman: 29-30 Mar 17

Lt. Gen. Thomas S. Moorman Building

U.S. AIR FORCE

INFORMATION

OPC Update

- COPC – 557 WW Attendees: TD, 2 WXG/CC, and Mr. Rance
  - Present 557 WW Mission Brief, GALWEM/Prod 10 update, CCRI
- GOES-R/16: L-M modified 2 of 3 antennas to receive GOES-16 and installed MIVB Servers – data flowing into building; working ingest of ABI data, integration into applications, and display on AFW-WEBS
  - Subscribe to AMVs (a.k.a. DMV) and ASR/CSR via WMO header bulletins
- Meteosat-8: Receiving via MIVB, feeding applications, displaying on AFW-WEBS, sending to FNMOC
- AF-NOAA Backup Services MOA:
  - Consolidates AWC/SPC, SWPC, and W-VAAC (3 appendices)
  - HAF (Mr. Stoffler) signature level
  - HAF awaiting NOAA comments; meeting w/ NWS (Tom Williams)

OPC Update

- Anticipate 1 Sep 2017 Command Cyber Readiness Inspection (CCRI)
- Continued Manual Failover to Backup COPC Circuit (78Y2 to 77LA)
- Submitted two SDPRs on 26 Jan
  - MODIS AMSU/AIRS for GALWEM (343 channels vs. current 300)
  - Soil Moisture Operational Products System (SMOPS) for 557 WW Land Data Assimilation System
- GALWEM: Operational goal – deliver GALWEM FOC (Mar 2018)
  - Native 17 km UM, output at ¼ degree resolution
  - 4DVAR DA at 557 WW with locally sourced obs
  - All required post-processed parameters available to dissemination system

OPC Update

- **Successful S-NPP Block 2.0 (including NDE2.0/PDA) Transition**
  - **After some issues data flowing to (and through) 557 WW routinely**
  - **ATMS HDF5 Block2.0 data sets – FNMOC rcv'd from NOAA (Tom King)**
- **DMSP RTMS: shipping to FNMOC per their request**
- **AF Life Cycle Management Center – Mr. Steven Lamb is OPR for funding of NESDIS Data Services Cost-Shares with 557 WW**

OPC Update

- **Backup Slides**

GOES-R Data Flow

GOES-R (GOES-16)
- Launch: 11/4/16
- Orbit: 75°W
- Replaces: GOES-13 (East)

GOES Re-Broadcast (GRB) Data
- ABI
- SEISS
- SUVI
- GLM
- EXIS
- MAG

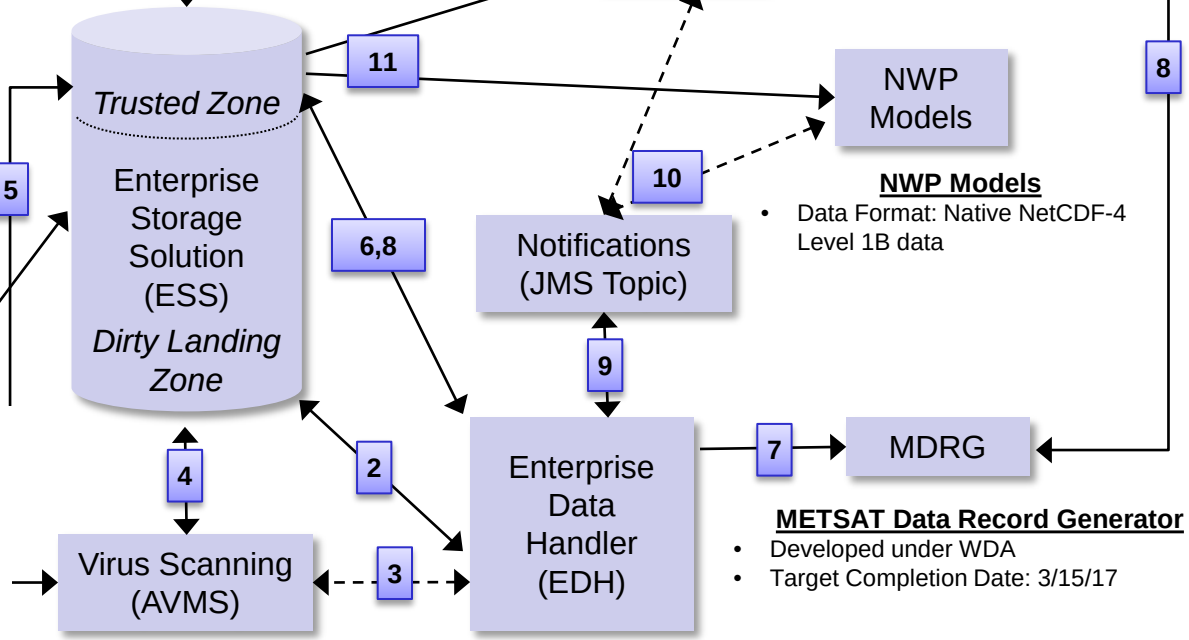
GOES-R Antenna
- Modification: 1-11 Nov 16
- Location: Offutt AFB
- SMC contract w/Lockheed Martin
- Equipment: Modified VSAT Antenna

Data:
- Raw ABI Only
- All 16 Channels
- 31.6 GB/hr

Data
- Native NetCDF4
- 7 Channels
- 19.8 GB/hr
- via SFTP?

MARK-IVB Server
- Installation: 1-11 Nov 16
- Location: 557 WW
- SMC contract w/Lockheed Martin
- Equipment:
  - 1 Ingest Server
  - 2 Data Servers

MWx Server
- Data Ingest Format: NetCDF4 level 1B
- Ingest Intervals: 15 min
- IP Addresses: TBD



AFW-WEBS
- Data Format: Raw NetCDF4 Files or MDRG generated file (GRIB2?)???

NWP Models
- Data Format: Native NetCDF-4 Level 1B data

METSAT Data Record Generator
- Developed under WDA
- Target Completion Date: 3/15/17

Last Updated: 9/13/2016

GOES-R Cont'd

1. Satellite/Sensors

Sensor(s): ABI, GLM, SEISS, EXIS, SUVI, Magnetometer
Channels: 7 of 16 channels
Cadence: 15 min

2. DRO/Comm Strategy

Via: Offutt AFB Mark IV-B Antenna & Server
Format(s): NetCDF4
Volume: 19.8 GB/hr (GRB) *ABI Only
Retention: 96 hours

3. Infrastructure

Processing: See Flow Diagram slide
Enclaves: Ingest via U, SFDB to SCI2, all visualized content to U, S, & SCI1, all data products to U, S
Sub-Systems: MW/DW, CDFS II, CDFS II OSE, SFT, Prod 8, Prod 10, ESS, 2GDP (U-S), 2GDP (U-SCI1), 2GDP (U-SCI2), AFW-WEBS, SWAFS, AVMS, EDH, JMS, **MDRG**

4. Applications/Products

WWMCA: Vis/IR Imagery, Lightning
WWMCA-M (SFT): Vis/IR Imagery
LIS: Land Surface Temp
LIS-AMPS (GEOPRECIP): IR Cloud Top Brightness Temps from CDFSII application, Same SDR just new METSAT
LIS-AMPS (CMORPH): IR Cloud Top Brightness Temps from CDFSII application, Same SDR just new METSAT
GALWEM: Cloud drift winds
AFW-WEBS: Existing Vis/IR/WV/Multispectral Imagery, Lightning
SWAFS: Geomagnetic Field, TBD?

5. Dissemination

Subscriptions: XXX
Web Services: XXX
Web Pages: XXX
Mobile Apps: XXX